

## NOTES ON GALERUCINÆ IN MY COLLECTION.

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In bringing my material in line with the new catalogue of Galerucinæ by Weise, I have run against many troubles. In the new list are many typographical omissions and mistakes and very many species omitted altogether (these will shortly be treated in a separate paper by M. Laboissiere). Possibly the state of Mr. Weise's health prevented the proper finishing touches. The catalogue revision was a big job but it lacks finish to make it reliable; and then, what to me is a serious drawback, the paper it is printed upon (my copy at least) does not admit of notations in ink.

**Oides niasensis** sp. nov.

Large sized, honey yellow with black elytral spots, elytra with 4 round sub basal spots 2 on each side, subhumeral and almost submedian, four large rounded and median, joined in pairs (dumb-bell shaped) not attaining either the edge or suture, and lastly a small round ante apical, sides of the breast and abdomen spotted with black.

Types of 2♂ 2 ♀ Lahago Central neas 4-11-10-111 1896 12 Kannegieter length 10-11 mm. Bow Coll.

Head smooth with impressed line on vertex, antennæ about half as long as body entirely yellow, joint 3-5 about equal, clypeus swollen and smooth, thorax evenly rounded, impunctate and without a definite depressions (1 example with 2 small brown submedian spots) elytra thickly and rather coarsely punctate without transverse depression but with rather a deep subhumeral; what I take to be the ♀ has rather a pear shaped form with the dilation at the rear; ♂ is not dilated but ovate, rather pointed behind. Near 12-maculata Cl. but differently spotted, shaped and marked.

Mr. Van de Poll had among his material 3 new species of *Haplosonyx* with Mr. Kannegieter's manuscript names attached which have been retained in the following species:

**Haplosonyx frenbi** sp. nov.

Median sized, light flavous, each elytron with 4 cyaneous blye, round spots, a humeral, two median, placed transversely oblique, and the last ante apical, the spots very lightly edged with brown.

Type 1 example Tandjong-Djati, Ran. Palembang '90, (J. Z. Kannegieter) length 10 mm. Bow. Coll.

Head with obsolete transverse depression but a deep frontal foveæ, antennæ, joints 2, 3, short, equal, thorax sparsely punctured with a deep transverse depression, elytra very obsoletely depressed below the base, thickly strongly punctured with two or three ill defined longitudinal, smooth lines. The markings easily indentify this form.

**Haplosonyx humeralis** sp. nov.

Much smaller than *Frenbi*, light flavous, antennæ fuscous between joints 2-10, each elytron with a large purplish spot covering the humerus, and sometimes attaining the scutel and extending nearly half the length of the body, inner margin rounded and very narrowly brown.

Type 1 example Tji Solak Wynkoopsbaai (Grelak) also 2 Java Oc. Sukabumi 2000 '93 (Fruhstorfer) Bow. Coll. length 6-8 mm.

Head sparsely punctate, foveate at the vertex, antennæ with joint 2-3 short, thorax sparsely punctate, with usual transverse depression, sides less angulate and more evenly rounded than usual, elytra, without transverse depression, but faintly impressed within the shoulder, thickly and evenly punctate, with in one example obsolete traces of longitudinal lines (♂?). The Grelak specimen is the one with Mr. Kannegieter's name.

**Haplosonyx monticola** sp. nov.

Large, stout, fulvous, with joints 6-8 of antennæ and tarsal claws brown, elytra brilliant metallic green with cyaneous reflexions, strongly transversely depressed below the base and with semi-regular seriate punctuation.

Types 12 examples Mt. Kina Balu, No. Borneo (Whitehead and Waterstradt) length 13-17 mm. Bow. Coll.

Head with sparse fine punctures, the usual transverse depression divided by a deep fovea, antennæ with 3 joint much longer than 2 (varying in sex) extreme tip dark, thorax with sparse, fine, scattered punctures, transverse depression obsolete in middle, deeply foveate at side, elytra strongly depressed within the shoulders and below the base, producing a tumid effect, punctures impressed but without striæ, fairly regular in front and on the disk, becoming confused at the sides and obsolete towards the apex, the cyaneous color seems more intense at the sides, elytral margin strongly reflexed and deeply foveate laterally below the shoulder. Easily distinguished by the color and striate elytra.

### **Hoplosoma melanocephalum** sp. nov.

Medium size, shining, light chestnut brown, head, antennæ and feet more or less blackish, the latter especially on the upper side.

Type 8 specimens, Fokien Bow. Coll. length 5-5½ mm.

Head convex, front very finely alutaceous, antennæ half as long as body, 3 joint rather more than twice as long as 2, thorax nearly square, deeply arcuately depressed behind, the sides the most so, also a supplementary fovea on the anterior middle disk, elytra nearly impunctate, lightly depressed below the scutel. The dark head and legs help distinguish this form. In M. Donckier's material labelled with what purports to be Mr. Jacoby's manuscript name which I have preserved. Among the Donckier material is a set of specimens labelled *Hoplasoma 4-pustulatum* Jac. This is *Phyllobrotica ? ornata* Jac.

In looking over the new Catalogue of Galerucinæ I am sorry to see generic names like *Aulocophora*, established for fifty years, superseded by others; and aside from strict priority (if that is granted) the utility of such change seems dubious. *Ceratia* in place of *Triaplatys* does not appeal to me. I retain *denticornis* Jac. in place of *Jacobyi* Wa. and *martia* Ws.=*denticornis* Jac.

Two new forms should be added to this subgenus.

**Ceratia (Triaplatys) foveata** sp. nov.

Small, ferruginous, breast and abdomen and 4 spots on the elytra black. Head of ♂ with two large approximate foveae occupying the whole front, limited by a ridge or line between the eyes, antennæ nearly as long as elytra, scape slightly curved and inflated, 2 joint small, rounded, 3d elongate, somewhat curved, flattened and concave in the inside, 4th broad quadrate, concave on the inside edge, 5th triangular, with inside angle truncated, vertex smooth convex, thorax impunctate, deeply transversely impressed behind the middle, less so in ♀ elytra very nearly parallel, not transversely depressed, sparsely and finely punctate, an elongate basal median, and subapical transverse spot, black; neither spot attains the suture or margin. The only ♂ among my examples is on a card, so I am unable to give details of the last abdominal segment.

Types 1 ♂, 3 ♀, Dilli, Port Timor, 2500' (Doherty) iv v also ♀'s from Batjan, Ternate, Timor (Doherty) Bow. coll. Length  $3\frac{1}{2}$ -4 mm.

The dilated ♂ antennæ and foveate head distinguish this form. *Duboulayi* Baly (not seen by me) is described as having foveate head; the elytral markings are those of *tetraspilota* Baly.

**Ceratia (Triaplatys) dohertyi** sp. nov.

Similar in coloration to *foveata* supra, ferruginous head, smooth with a deep frontal fovea, antennæ ♂ about  $\frac{3}{4}$  length of elytra, scape somewhat inflated and curved, 2 joint small, rounded, 3 elongate, triangular, flattened, 4 and 5 elongate, rounded on sides and ends flattened, smooth, shining and slightly concave within, thorax smooth impunctate angulate before the middle, deeply transversely grooved at about the middle, elytra slightly dilated behind, slightly depressed below the scutel, and very finely punctulate, a basal patch which does not attain the scutel but usually covers the shoulder and a transverse outer apical patch which does not touch either the margin or suture, black, legs yellow, breast and abdomen black, except the last segment which is deeply cut on either side, and

deeply longitudinally channeled in the middle, the extreme ends and edges being yellowed.

Type 1 ♂ Dilli Port Timor 2500 (Doherty) IV V 2 ♂ Dilli May '92 Doherty 3 ♀ do Bow. coll. Length 5-6 mm.

The flattened elongate, concave joints of the ♂ antennæ distinguish this form and are a connecting link between species with dilated triangular joints, *denticornsis* Jac. and these with scant dilation like *diversa* Baly.

### **Luperodes pustulatus** sp. nov.

Small, black, thorax and legs rufous, each elytron with three round flavous spots placed in line down the middle, on each side, the one nearest the end sometimes faint or wanting.

Types 5 examples Cordico Bolivia (green label) Bow. coll. Length 3 mm.

Head sparsely finely punctate, finely transversely and longitudinally sulcate, thorax rather transverse, finely punctate, feebly impressed either side behind, elytra very finely punctulate; the spots are placed, one just below the base, the second antemedian, the third on the elytral declivity. The tibiæ and tarsi are more or less brown; the spots easily distinguish this form.

### **Luperodes mapirii** sp. nov.

Small, stout, shining rufous, antennæ, tibiæ and tarsi browned, elytra entirely black excepting a common triangular rufous spots, which begins on the base at the inner shoulder and runs obliquely to the suture at the apical third.

Type one specimen San Augustin Mapiri 3500 ft. 95 (Stuart). Length 3 mm. Bow. coll.

Antennæ slender, joints 2, 3, 4 gradually increasing in length, head and thorax very finely punctate, the latter obsoletely depressed at the sides, elytra finely punctured, obsolete behind, and very slightly transversely depressed, first joint of hind tarsi very elongate, more than half as long as the tibia, apex of all the tibiæ and tarsi brown. Easily distinguished by the color.

**Luperodes pilosus** sp. nov.

Medium sized, rather stout, nearly parallel sided, black, elytra only, dull dirty yellow, with dusky suture and sides, tending to run together in the middle, sparsely pilose.

Type one specimen Cochabamba, Bolivia Germ. Length 5 mm. Bow. coll.

Head with longitudinal groove on vertex, elongate frontal tubercle between the eyes, antennæ with joints 2, 3, 4 gradually increasing in length, thorax with sides very slightly rounded, upper surface finely punctulate, uneven, with side depressions obsoletely indicated, elytra closely, finely punctate, semi-rugose, the surface showing faint sulcations on the rear half especially on the sides—the pilose elytra easily distinguish this form.

**Luperodes flavipennis** sp. nov.

Large sized, shining, black, except the elytra and abdomen which are pale yellow.

Type 3 examples Cachabé low. c. xii 96'7 Rosenberg. Length 6-6½ mm. Bow. coll.

Form stout, oval, like *angusto-lineata*, antennæ about two-thirds length of body, slender, 2 joint a trifle more than half as long as 3, front transversely impressed between the eyes, head and thorax sparsely, minutely punctulate, the latter arcuately impressed at the rear, obsolete in the middle, elytra thickly but very finely punctulate, without transverse depression below the base. A well marked form unlike any other.

**Luperodes hebardei** sp. nov.

Medium size, narrow, and parallel shaped, thoracic margin bright, elytra dull, opaque, ochre yellow, head, antennæ, body beneath and legs black, also a shining discoidal thoracic spot, two large sutural spots widened abruptly at the scutel and behind the middle, the lateral margin (not reaching the apex) and three branches from the marginal color, humeral, median and post median black.

*Var. a.* The marginal marking absent, the three branches therefrom, representing three dots, a humeral, median and sub-lateral at apical two thirds, also the sutural stripe reduced to two common spots, scutellar and submedian.

Type 4 examples Caracas, 1 Venezuela (probably Caracas) var. a 1 example Magdalena Columbia.

Sn Lorenzo Mt. 8500 ft. vii-28-20 (M. Hebard) No. 151 from Mr. Frank R. Mason. Length 4 mm. Bow. coll.

Head punctate with strong cross and longitudinal grooves, antennæ reaching beyond the middle of elytra, joints 2, 3 small, the latter slightly the longer, thorax with arcuate impression, deep at sides, obsolete behind, with marked longitudinal groove, the discal spot attains only the front margin and the sides form the ends of the arcuate depression, the whole surface is shiny but finely punctulate. The elytra dull without luster, or depression, with the black markings sharply defined, in some specimens the sutural edge is very narrowly darkened to the apex. In the var. the thoracic spot approximates to the basal margin. Seems related to *intramarginalis* Kirsch.

### **Luperodes suturalis** sp. nov.

Very like *hebardei* only larger and very similar in looks and markings, the difference being the thoracic spot leaves only the lateral margins yellow, on the elytra the lateral stripe is much thicker and is submarginal, leaving the edge itself yellow, the sutural spots coalesce into a stripe a little widened before and behind, the general effect being to show the elytra black with a narrow lateral border or a sinuate median vitta on each side, joining at the apex, which is broadly yellow, sutural area lightly depressed behind the scutel.

Type 3 examples Marcapata Peru marked n. i. m. in 2nd Jac. coll. Length 5 mm. Bow coll.

Very closely related to *hebardei*, but the general effect is shiny not opaque. In one specimen the black color shows a tendency to cross the yellow median vitta, the punctuation is very minute while the thorax shows 4 well marked foveæ, 3 where the arcuate depression is, or should be, the 4th apical.

**Luperodes vittatus** sp. nov.

Very like *suturalis* but with the black color replaced by greenish aeneous, thorax entirely of this latter color margined with yellow and with 3 large foveæ placed 2-1, also a small apical; elytra yellow, with a broad humeral sublateral, and sutural, aeneous stripe, the former not quite attaining the tip the latter becoming very fine at the apex.

Type 4 specimens (green label) Bolivia (Cordico?). Length  $5\frac{1}{2}$  mm. Bow. coll.

Head æneous, sparsely punctate, with well marked frontal fovea and cross sulcation, thorax sparsely punctate, more thickly in the foveæ, margined, and sides rounded, the yellow margins broadened at the anterior angles, elytra parallel, smooth, shining, sparsely punctate, the sutural stripe is a little widened at the scutel; the general appearance is of an evenly striped handsome form, body beneath and legs with less greenish tinge.

**Luperodes bruchii** sp. nov.

Again close to *suturalis*; entirely shining black, except the sides and base of the thorax are yellow, and on each elytron, nearly surrounding the humerus is a triangular yellow patch, partly encircling the humerus (leaving it black) with an angle directed towards but not reaching the suture, the yellow patches on either side leave an even, wide sutural black band a trifle wider at the scutel.

Type 1 specimen Argentine Prov. Catamarca 4-111-07 (Bruch). Length 4 mm. Bow. coll.

Head punctate, with deep transverse and longitudinal furrow, antennæ moderate, joints 2, 3 equal, thorax very sparsely punctulate, obsolete foveate on either side, the ordinary connecting acuate depression very obsolete, the black spot is discal, including the anterior edge, the elytra are finely punctate, somewhat depressed along the suture, but no basal depression, body below not as shining on account of short pubescence.



**Luperodes klageri** sp. nov.

Small sized, head, thorax and scutellum fulvous, antennæ and legs more or less brown, elytra, straw yellow with common sutural and broad humeral sublateral, brownish æneous stripe.

Type 2 examples San Catharine Brazil (Klages) length  $2\frac{1}{2}$  mm. Bow. coll.

Antennæ reaching nearly the tip of body joints 2, 3 almost equal, thorax with transverse arcuate depression well marked at the sides, the outward stripe attains the apex in a very fine line, the other vitta stops abruptly, near the turn of the wing cover. Easily distinguished by the size and elytral pattern.

**Luperodes maculicollis** sp. nov.

Large sized, black æneous above, thorax yellow except for an anterior discal æneous spot, elytra æneous with an almost straight yellow median fascia, abdomen yellow.

Type 1 specimen Rio Madeira Brazil (Mann & Baker) 1 specimen Porto Velho, Amazons No. 2220 (Prof. Thaxter) Bow. Coll. Length 6 mm.

Head with deep transverse groove between the eyes, vertex evenly and rather strongly punctate, antennæ more than half the length of body, joints 2, 3, gradually increasing in length, remainder elongate, nearly equal, thorax shining, nearly impunctate obsoletely arcuately impressed at the rear, the discal dark spot covers the middle of the anterior margin and is rounded so as to reach the arcuate impression, elytra with bronze color well marked, without transverse depression; the yellow fascia is about  $\frac{1}{2}$  mm. wide, very lightly arcuate and does not pass the reflexed margin.

**Luperodes cyaneoplagiata** nov. sp.

Large sized, fulvous yellow; head, metasternum, tibiæ and tarsi (except the last joint) antennæ joint 2 to  $8\frac{1}{2}$  brownish black; elytra with a broad basilar cyaneous basal, and a large cyaneous transverse ante apical spot.

Type 2 examples Cochabamba Bolivia (Germ) Bow. Coll Length  $6\frac{1}{2}$  mm.

Head with usual transverse groove, vertex almost smooth, antennæ nearly as long as body, extreme tip of last joint dark, thorax punctulate and depressed at the sides, which are slightly rounded, elytra without depression, thickly and finely punctate, the basal band is a little longer at the sides than the middle, where it is a little short of one third the length, the posterior spot is at the apical third and does not attain either the suture or margin, the rear portion of the elytra including the spot shows faint sulcations; all the legs have the last tarsal and claw joints fulvous.

*Luperodes javanensis* Jac=*Monolepta subra* Gyll next following the description of *M. rubra* Gyll. is ? *flavicollis* Gyll. This seems to be a form of which many examples are in my collection, all apparently coming from North Borneo (Waterstradt), the color is *coccineus* with very light flavous thorax, head with a large, deep, semicircular fovea, anterior femora with a minute tooth. Temporarily I place it in *Monolepta*.

From the descriptions of Monsieur Pic, I mark in my collection of *Crioceris*; *laosensis* Pic=var *impressa* Fabr, *borneensis* Pic=*binotata* Boh, *malaccana* Pic=*seminigra* Jac, *rouyeri* Pic=*dromedarius* Baly, *latefasciata* Pic=*unipunctata* Fabr.

*Luperodes rufescens* Bow. nom. præoc, changed to *weisei* Bow.

### **Luperus masoni** sp. nov.

Small, flavous, antennæ darkened at tip, thorax with two small discal spots indicated, and a long seta on each rear angle, elytra, black, slightly iridescent, all the margins narrowly flavous, the suture and base more broadly than the sides.

Type 1 example Bolivar; Colombia, Cartagena, vii-11-20 Chapparral, Fred Mason, No. 92 Bow coll. Length 2 mm.

Very close to *marginatus* Jac. (type in my coll.) and *albo-marginata* Jac. but much smaller than either; the former has a black head and thorax; the latter in addition to being much larger has the elytra much more heavily margined with flavous,

moreover these margins are even and well defined, whereas *masoni* has them narrow and *not* well defined or limited. The Jacoby species has also a dark spot on the breast.

### **Luperus beniensis** sp. nov.

Small, below dirty testaceous, antennæ and body above very dark brown, fairly thickly punctulate, the edges of the elytra especially the sutural, diffusely light colored.

Type 4 examples Reyes, Beni Riv. 7-8-95 (Stuart) 3 specimens labelled Peru, M. Kirsh (2 Jac. coll) Bow. coll. Length 2 mm.

Antennæ ♂ (?) slender, longer than the body, somewhat flavous at base shorter ♀ (?). Again very close to *marginatus* Jac., but that form is black below, less punctured above, with the light margins plainly defined, besides being larger.

### **Luperus pallidus** sp. nov.

Small, entirely dirty yellow, antennæ comparatively short and slightly darkened towards the tip, surface very lightly punctulate, smooth, shiny, no depression on the thorax and only a very obsolete one on the elytra below the inner shoulder, one specimen has the elytral edge slightly darkened, also the abdomen. It is small, insignificant, but the only light colored form rated from South America.

Type 3 specimens Bolivar, Colombia, Cartagena vii-11-20 (F. A. Mason) No. 93. Length  $2\frac{1}{2}$  mm. Bow. coll.

### **Luperus blumenensis** sp. nov.

Medium sized, shining black, head, thorax, scutel and base of femora yellow, elytra without depression, thickly and closely punctate.

Type 1 example Blumenau, So. Brazil (Reitter) Bow. coll. Length 4 mm.

Head with smooth shiny vertex, antennæ not reaching the end of the body, joints 2, 3, 4 gradually increasing in length,

thorax rather transverse, convex, obsoletely punctulate, the black in the femora is more extended on the upper than the under side, smaller than *xanthaspis* Germ. and more shining.

**Malacosoma (Exora) cyaneomaculatum** sp. nov.

Medium sized, fulvous yellow, antennæ, tibiæ, tarsi and apex of femora bluish black, the apical third of elytra covered by a cyaneous blue patch, which attains but does not cover the inflexed edge, the basal two thirds with a distinct golden sheen.

Type 3 examples Callanga, Peru, sent me by Messrs. Staudinger and B. Haas as cotypes of *Diabrotica cyaneo-maculata* Jac. (M. S. S.). Length 6 mm. Bow coll.

Head with a deep transverse groove and a few punctures on the vertex, antennæ long, joints 2-3 nearly equal, thorax shining with obsolete basal and lateral depressions and everywhere, finely punctured, elytra closely, strongly, evenly punctate, slightly depressed at the suture below the base, the fulvous part somewhat sheeny. In all probability the specimen sent Mr. Jacoby for identification was *Diabrotica*; this looked like it superficially and were so sent out by the dealers.

**Malacosoma (Exora) basale** sp. nov.

Large sized, deep orange yellow, antennæ except (first 2 joints) (last 3 lacking) tibiæ and tarsi blackish blue, elytra very closely coriaceously punctate, base broadly cyaneous purple, or blue.

Type 1 example Santa Fe de Bogota, 1 in the 1st Jac. coll. Bogota; 1, 2nd Jac. coll. no locality, the last two specimens have the purple confined to a broad basilar band and this I regard as the typical form. The first specimen, which is the most perfect, has the dark color extended nearly to the apex. Length 9-10 mm. Bow. coll.

Head with well marked transverse groove, at vertex sparsely, finely punctate, antennæ with 3 joint twice length of 2, thorax transverse, sides nearly straight very finely sparsely punctulate, depressions only indicated, elytra, stout, parallel, without de-

pression, coriaceous, the yellow color has more or less metallic sheen. A fine well marked form, *dubia* Oliv. seems to be smaller and smooth.

**Malacosoma (Exora) guttatum** sp. nov.

Medium sized, dark chestnut brown, head except the lower face, and metasternum black, elytra very thickly punctate, normally with two elongate parallel black spots on each side, one humeral, the other basilar and almost touching the end of scutellum and parallel to the first spot and the suture, this 4 spotted is the normal form, varieties occur where there is a further double series of spots, in direct extension of the normal spots, these additional spots are median and ante apical.

Type Rio Janeiro, Espirito-santo, Brazil, 2 labelled Miers. Coll. represent the most spotted vars. 6 specimens in all. Bow. coll. Length 7 mm.

Head with transverse depression and frontal fovea, vertex shining, nearly impunctate, antennæ more than half the length of body, joints 2, 3 equal, first 3 or 4 joints rufous, rest black, thorax same shape as *obsoleta*, shining nearly impunctate, elytra without depression, the punctuation a trifle obsolete at apex, in *obsoleta* the sutural spots are *subbasal* and do not attain the margin, in *guttata* they always start *at* and *include* the margin.

**Malacosoma (Exora) quadripustulatum** sp. nov.

Small, black, head and thorax rufous, each elytron with two large flavous spots, one triangular subhumeral, with apex near the suture, the other oval, midway between the middle and apex.

Type 1 example Rio (2 Jac. coll.) 2 Misiones Prov. Argentine, Bow. coll. Length  $4\frac{1}{2}$ -5mm.

Head with front more or less darkened, antennæ nearly as long as body, joints 2, 3 equal, thorax sparing punctulate, sides very nearly straight, elytra finely punctate, depressed along the suture, below the scutel, the spots rest on the inflexed margin and do not attain the suture.

**Malacosoma (Exora) rosenbergi** sp. nov.

Medium sized, yellowish fulvous, antennæ, knees and tibiæ and tarsi dark brown, elytra with two rufous stripes on each side the first sublateral from the humerus to below the middle, the second almost median curving outward below the middle, but not quite joining the first.

Type 3 examples Cachabé low c xii-96 and i-97 (Rosenberg), Length  $5\frac{1}{2}$  to 6 mm. Bow. coll.

Head transversely sulcate, vertex almost impunctate, antennæ with joints 2, 3 nearly equal, thorax with form of *encaustica*, almost impunctate, elytra thickly and evenly punctate, without depression, the suture very narrowly edged with rufous; the first stripe begins on the shoulder and running nearly parallel to the edge, ends at the curve of the elytra; the second begins below the base at about the middle and runs straight to a little below the middle half, when it curves gracefully outward, so that (if prolonged) it would join the first. The apex is ciliate with a few fine hairs, the under edge of the epipleuræ is also narrowly rufous, the color of the brown parts varies tending to become rufous. The curved stripe easily separates this form.

**Malacosoma (Exora) buckleyi** sp. nov.

Medium sized, brown, head (except the labrum) black, elytra with a large ill defined humeral, and an oblique ante apical patch blackish blue, breast more or less black.

Type 3 examples Yurimaguas, Peru (Buckley). Length  $6\frac{1}{2}$  mm. 2 examples Surinam (Fruhstorfer) (2 Jac. coll.) Bow. coll.

Head with strong transverse depression and frontal calli, vertex finely punctulate, antennæ moderate, joints 2, 3 nearly equal, thorax transverse, slightly angulate at the middle, very obsoletely depressed and punctulate, elytra moderately punctate, showing traces of longitudinal sulci here and there, the extent of the dark area varies greatly being in one specimen extended along the side and towards the suture and in another reduced to a mere wisp on the shoulder and the same with the rear spot,

the forms with a minimum of dark have rather stronger punctuation. There seems no particular distinctive feature to this form. The Surinam examples are smaller and darker colored, only the sutural area being indefinitely lighter.

**Malacosoma bellum** sp. nov.

Medium sized, rufous, antennæ, apex of tibiæ and tarsi darkened, elytra closely finely punctate shining violet purple.

Type ♂, ♀ Rio Janeiro, Brazil (Klages ?). Length 5-5½ mm. Bow. coll.

Head with well marked transverse impression, with convex nearly smooth vertex, antennæ moderate length, joints 2, 3 equal or nearly so, 3 basal rufous; thorax transverse, smooth shining convex, almost without trace of depression or punctures, elytra parallel, impressed within the shoulder and very slightly at the suture below base, punctuation obsolete seriate on the ♀ disk, the suture very narrowly cyaneous. I should have referred this form to *dubia* Oliv. if that did not call for *smooth* elytra.

**Malacosoma (Exora) simile** sp. nov.

Medium sized dull fulvous, antennæ, 4 spots at base of elytra and 4 anteapical black

Type 1 ♂ Caraca, Brazil. Bow. coll. Length 5½ mm.

Head scarcely depressed between the eyes, vertex convex smooth, antennæ (last 4 joints missing) 2, 3, very small, nearly equal, remainder elongate, thorax transverse, smooth, almost impunctate elytra very thickly evenly punctate like *guttata*, an elongate spot at the shoulder and a round one either side of the scutel, and 4 placed transversely just before the apex. *Guttata* is larger, has a black head and breast and light antennæ, *similis* has black antennæ and light head and breast.

**Malacosoma (Exora) octoguttatum** sp. nov.

Small, chestnut brown, antennæ dark, elytra with four elongate spots at the base (2 each side) and four round spots transversely placed just behind the middle.

Type 1 specimen Rio Janeiro, Bow. coll. Length 5 mm. var. A, So. Brazil, anterior spots joined, forming a band and rear spots a lunule.

Antennæ nearly as long as body, joints 2, 3 nearly equal, front of head and thorax convex smooth, elytra smooth shining obsoletely punctate, the basal spots are humeral and next the scutel, the other spots are placed evenly in line just back of the middle; near *similis* and *guttata* but without the elytral punctures of either, and the rear spots are much nearer median.

**Malacosoma (Exora) maculatum** sp. nov.

Size of *olivacea*, color light yellow, elytra alutaceous with punctuation, antennæ, tibiæ and tarsi, scutel and 5 spots on each elytron black, body beneath more or less brown on the breast and segments, thorax with 5 spots indicated in dark red.

Types 5 examples San Augustin, Mapiri, 3500 ft. ix 95 Stuart. Length 6 mm. Bow. coll.

*Var. a*, thoracic spots shown in brown, median spots on either side joined. Cochabamba, Bolivia, Germ.

Antennæ about two-thirds length of body, joints 2, 3 about equal, upper joints lighter color, head with well marked transverse groove, vertex convex, thorax with wide, though not deep, median lateral foveae and with 5 spots indicated in color, 2 lateral, 2 median with an apical between, scutel black, elytra with punctuation more marked, but still semi shiny, the spots on each side are a subbasal humeral and median, two median directly in their rear and the fifth large rounded, subapical, in the variety the median are joined together, and the thoracic spots are brown; near *olivacea* Oliv. but that species has 4 series of spots and this only 3.

*Chthoneis* Baly, as at present used, seems to contain rather incongruous forms. It was founded upon *apicipennis* from Colombia this species has joints 2, 3 of antennæ very short, equal, the following joints compressed and elongate; a smooth thorax and unarmed hind tibiæ, then followed species with foveate, thorax (*albicollis*) in 1880 Jacoby added *apicalis* (type in my coll.) (also Godman and Salvin, Brit. Mus.?) though ap-



parently with some latent doubt; the antennæ are (in my specimen ♂ ?) very different from the typical form and the hind tibia have a short spine, in the *Biologia*, Jacoby adds two Mexican forms, *dilaticornis* where the ♂ has distorted antennæ, both this and *jansoni* have a rather slender elongate body tending towards *Luperus*; on the other hand *Luperus fucatus* Er. I remove to *Chthoneis*. There are several new forms which are closely allied to the foregoing.

### *Chthoneis grossa* sp. nov.

Size, form, and structure of *apicalis*, Jac, rufous, the edges of the elytra and thorax a little yellowed, antennæ, tibia and tarsi and nearly the whole of the abdomen black; rufous part of the elytra with a distinct iridescent tinge.

Type 1 specimen, Brazil (Mann) Bow. coll. Length 10 mm.

Head with transverse groove between the eyes, vertex sparsely and finely punctate, antennæ barely two-thirds length of body, 2 joint short, 3 half longer, remainder elongate and somewhat compressed, thorax (exactly like *apicalis*) transverse, all the angles prominent, sides slightly rounded, depressed anteriorly on either side, and with a median posterior fovea and anterior longitudinal sulcation, whole surface punctate, scutel almost smooth, elytra much wider than the thorax, without any depression, very thickly evenly punctate, the hind tibiæ have a small but distinct spine. The claws are appendiculate.

The future will probably separate both this form and *apicalis* from the present genus. I merely follow Mr. Jacoby.

### *Chthoneis marginipennis* sp. nov.

Medium sized, black, with epipleuræ, reflexed edge of elytra to the tip, the basal margin, and suture so as to enclose the scutel, white.

Type 1 example Gua. (G. D. Smith) Bow. coll. Length 6 mm.

Antennæ not quite as long as body (♀) ? 3 joint longer than 2, first few joints narrowly white at base, head sparsely punctate

with a deep frontal fovea, thorax transverse, thickly coarsely punctate, deeply foveate either side of the middle and with a moderate subapical depression, scutel smooth, elytra thickly and evenly punctate, more finely than the thorax, quite strongly impressed within the shoulders and somewhat along the anterior suture, so that the scutellar area seems prominent. Rather an intermediate form but easily recognized by its color.

### **Chthoneis foveicollis** sp. nov.

Moderate sized, elongate, rufous, antennæ, tibiæ, and tarsi blackish purple, elytra very closely punctate, purple violet, semi alutaceous.

Type 1 example (♀) San Augustin, Mapiri 3500 ft. 1-95 Stuart. Bow. coll. Length 8 mm.

Belongs near *dilaticornis* Jac. being of the same elongate form, head sparsely punctate, with frontal fovea and transverse depression, antennæ not quite as long as body, joints 2, 3 equal, though not very small, thorax transverse, sides slightly rounded, surface rather thickly punctured with 4 fairly well defined foveæ, an apical and basal and lateral median, elytra slightly impressed within the shoulders and on the suture below the base, very obsoletely sulcate toward the apex.

### **Chthoneis stuarti** sp. nov.

Small, head rufous with black spots on the labrum and vertex, antennæ black, apical joints white, body below black, legs black with basal two-thirds of femora rufous, thorax rufous, scutel and elytra black, very slightly viridi-æneus.

Type 4 examples Reyes 7-8-95 (Stuart). Length  $4\frac{1}{2}$  mm. Bow. coll.

Head with deep transverse groove at the top of the eyes, vertex finely and sparsely punctate, antennæ longer than the body ♂, shorter ♀, 3 joint half longer than 2 (like *apicalis*) extreme tip of 11 and base of 9 dark, intermediate joints ♂, dilated and lengthened (fairly typically), thorax convex, shining, sparsely punctulate, distinctly foveate either side at the middle, elytra

faintly impressed within the shoulder, very thickly evenly punctate, first joint of front and middle tarsi dilated ♂. Intermediate between the strictly typical forms and the elongate Mexican, like *Jansoni* Jac.

### **Chthoneis rufulum** sp. nov.

Small, entirely rufous—flavous, except the eyes, which are black and the antennæ after the third joint dark brown.

Type 1 example ♂, So. Brazil. Bow. coll. Length 4 mm.

Head with frontal fovea between the eyes, antennæ longer than the body, strictly generically typical, i. e. joints 2, 3 very small, equal, subsequent joints dilated and elongate, thorax convex, transverse, smooth, with a very obsolete lateral fovea, elytra smooth, shining, sparsely finely punctulate, very obsoletely depressed at the suture below the base. This form is at once separated by its size and color.

### **Chthoneis boliviensis** sp. nov.

Small, æneous brown, elytra cyaneous blue, lower face, last 2 joints of antennæ (except extreme tip) sides of the thorax, and femora pale yellow.

Type 4 examples San Augustin, Mapiri 3500 ft. 95, Bow. coll. Length  $4\frac{1}{2}$  mm.

Head smooth, with usual cross depressions, and fovea, antennæ elongate, joints 2, 3 very short, equal, remainder elongate, compressed, vertex shining, almost impunctate, thorax shining sparsely punctate, obsoletely depressed on the sides and disk, the former narrowly flavous, this color impinging upon the base in a fine line, elytra slightly depressed at the scutel, parallel, surface very closely strongly punctate and rugose.

Like *marginicollis* Jac. but very much smaller.

### **Chthoneis rosenbergi** sp. nov.

Medium sized, elongate parallel, lower face and thorax rufous, last 4 joints of antennæ and legs flavous, upper head, and body below black, elytra dark blue.

Type 8 specimens Cachabè low c. xii 96 (Rosenberg)  
Length 7 mm. Bow. coll.

Head with swollen shining vertex, antennæ about as long as body, nearly typical, joints 2, 3 short, equal, thorax nearly smooth, shining, deeply foveate each side at middle (like *bivittata*) elytra very closely, strongly punctate, legs flavous with extreme tarsal joint and claw dark, the same elongate form as the Mexican species of the *Biologia*.

### **Chthoneis donckieri** sp. nov.

Medium sized, rufous, antennæ, tibiae and tarsi purplish black, elytra bright purplish violet.

Type 8 specimens Cochabamba, Boliv. Germ. Length  $4\frac{1}{2}$ -5 mm. Bow. coll.

Head with vertex finely punctate, antennæ nearly as long as body ♂, shorter ♀, joints 2, 3 short, equal, remainder elongate, compressed, thorax convex, shining, rather strongly punctate, moderately foveate on either side at the middle; elytra feebly impressed within the shoulder, very thickly evenly and strongly punctate, close to *æneipennis* and possibly only a variety of that form. Was among the material sent me by M. Donckier.

### **Chthoneis æneipennis** sp. nov.

Medium sized, elongate, parallel, shape of *jansoni* Jac. Head, thorax, base of femora, pro, and meso thorax rufous, antennæ black, except last 3 joints white, elytra very closely punctate, æneous, body beneath and legs except as above black.

Type many examples Cochabamba Boliv. (Germ.) Bow. coll. Length  $5-5\frac{1}{2}$  mm.

Head with frontal fovea and sparse punctures, antennæ about as long as body, 2 joint not very small, 3 half longer, following joints dilated, extreme apex dark, thorax convex, nearly smooth, distinctly foveate each side at middle, elytra more or less distinctly impressed within the shoulder, the surface very closely and at the sides rugously punctate.

**Scelolyperus tenuimarginata** sp. nov.

Long, parallel, straw yellow; tibiæ, tarsi and upper sides of femora dark brown, abdomen and metasternum metallic cyaneous with gray pubescence, epipleura, the reflexed edges posteriorly, and the suture for apical two thirds, very narrowly edged with metallic greenish black.

Type 1 ♂ example Brazil ♀ (2d Jac. coll.) Bow coll. Length 8 mm.

Head with long well marked longitudinal furrow, antennæ long and slender (4 upper joints missing), thorax broader than long, smooth with vague lateral impressions, elytra thickly rather coarsely and confusedly punctate with numerous obsolete costæ, especially indicated towards the middle, the metallic coloring below is almost similar to that of *S. bella* Jac. and *S. viridis* Jac. In the shape of the thorax this species is allied to *S. flava* All. from Argentine, which is not strictly typical in the shape of the thorax.

**Scelolyperus rosenbergi** sp. nov.

Medium sized, black, with lower face, thorax, joints 9-11 antennæ (except tip), fulvous or yellowish white, elytra dark purplish blue, very closely, thickly and rugosely punctate with two or three obsolete costæ, of which the most marked is one at apical third, a little the lateral side of the middle.

Type 1 example Cali, Colombia ix-xii-94 Rosenberg. Bow coll. Length 7 mm.

Head with vertex almost smooth, in certain lights tinged with greenish, antennæ graceful, nearly as long as body, joints 2, 3 almost equal, thorax rather transverse, smooth, convex, almost impunctate, the scutel is smooth, the punctuation of the elytra, excepting the costal indications is similar to *bella* Jac.